


Painting APG Green

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A new coat of paint protects and beautifies, but some chemicals in paint are harmful to your health and the environment. You can prevent pollution in all of your painting jobs by choosing paints and equipment carefully. Painting is an important part of Aberdeen Proving Ground's mission support. Small parts, tanks, buildings, vehicles, aircraft and many other items require painting. While it is true that regulations and customer demands have encouraged manufacturers to make less polluting products, the best way to prevent pollution is to avoid painting whenever possible. For example, brick and vinyl siding for exterior walls are good choices. These walls never need painting, which saves time and money. On interior walls, where the traffic is high, wood paneling or vinyl-covered drywall eliminate painting in those areas.

When painting is necessary, choose water-based (latex) paints whenever possible. Latex paints are healthier alternatives to oil-based products because they contain smaller amounts of volatile organic compounds, called VOCs, which evaporate easily into the air. VOCs contribute to ground-level ozone formation. While ozone in the stratosphere protects us from harmful ultraviolet rays, ozone at ground level can be harmful to breathe. Ground-level ozone forms when VOCs react with other pollutants called nitrogen oxides (NO_x) in sunlight, causing ozone levels to usually be higher on hot, sunny days. At high levels, ozone can cause irritation of the nose and throat, coughing and painful breathing. Children, the elderly and sufferers of asthma, emphysema or pneumonia are more likely to be affected. Ozone can also damage plants as well as materials like rubber and structures like bridges. When ozone levels are forecast to be unhealthful or approaching unhealthful, the Ozone Action Days flags are displayed at the gates. On these days, minimize outdoor activities.

VOCs + NO_x +  = ground-level ozone

Latex paints are also preferred over oil-based products because they can be cleaned up with soap and water rather than harmful solvents like mineral spirits, which contain high levels of VOCs and generate hazardous waste. Latex paints are available for a wide range of applications, including automotive refinishing, painting traffic lines or exterior metal surfaces and for architectural uses. You can buy latex paints in aerosol cans, and there are even chemical agent resistant coatings (CARC) available, which are used on military equipment and vehicles.

Just because paint is water-based does not mean that it is entirely safe. Some latex paints are more harmful than others. The Directorate of Safety, Health and Environment makes it easier for you to select architectural paints that are environmentally preferable by providing a paint standard that restricts VOCs and prohibits certain hazardous chemicals.

In an effort to reduce pollution, APG uses efficient painting equipment, such as high-volume, low-pressure (HVLP) paint guns. Although HVLP guns are required in

Maryland for vehicle refinishing, APG uses them in many other applications because they are more efficient than conventional paint guns, reduce overspray and prevent pollution.

Sometimes, in spite of the best efforts to buy just the right amount of paint, you may have usable, unwanted paint left over. Now you can recycle your usable latex paint by taking it to the Re-Nu-It Centers before October 8. After October 8, the Re-Nu-It Centers will not collect paint again until the next recycling opportunity in the spring of 1999. In the Edgewood area, you may take the paint to building E5703 on Wednesdays or Fridays from 10 a.m. until 6:15 p.m. or, in the Aberdeen area, to building 5413 on Tuesdays, Thursdays or Saturdays from 8:00 a.m. until 4:15 p.m. The paint will be mixed with other paints of similar colors by Harford County and donated to the Loading Dock, a non-profit organization in Baltimore. Leslie Kirkland, executive director of the Loading Dock said, "We collect and distribute over 10,000 gallons of paint annually, making use of what would otherwise be waste. Over 3,000 gallons are given away to our low-income clients through special events, and the rest of the paint is distributed for a nominal handling fee of \$ 3 to \$5 per gallon."

For more information about how to prevent pollution at work and at home, or to receive a copy of the APG paint standard, call the Directorate of Safety, Health and Environment at 278-4529 or 278-7898.

Sheila Jones is under contract to support the Directorate of Safety, Health and Environment.

Photo by Sheila Jones

Photo caption: David Spinazzola, painter/glazier with the Directorate of Public Works Minor Repairs Branch, uses a high-volume, low-pressure paint gun and latex paint to prevent pollution.